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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Roger L. Johnston

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BOYLE FREDRICKSON NEWHOLM STEIN & GRATZ, S.C.
250 E. WISCONSIN AVENUE
SUITE 1030
MILWAUKEE, WI 53202

EXAMINER

CHIN, PAUL T

ART UNIT

PAPER NUMBER

3652

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/080,982	JOHNSTON, ROGER L.	
	Examiner	Art Unit	
	PAUL T. CHIN	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant recites "first, second, and third horizontal lines interconnecting said first, second, and third booms form an acute triangle" in claims 1,13,14,16-18, and the recitation is vague and indefinite. Note that only the first, second, and third booms are interconnected to form an acute triangle, but the lines, which are not clearly defined, could not be interconnected. Moreover, applicant recites "rigging that extends downwardly from the beams and that is detachably coupleable to the load after the gantry crane is transported to a position in which at least one of the beams is located over the load, the rigging lifting the load from the ground upon subsequent extension of said booms and that then being releasable from the load upon subsequent retraction of the said booms" in claims 1-3,7,13,14,16, and 21. It is not clearly understood that applicant is claiming "a method of loading a load on the gantry and unloading the load from" in combination with the device or is merely reciting "functional limitations". There is no antecedent basis for "said vehicle" in claim 20, line 3.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4,7,9-11,17-19, and 21-23, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) (see PTO-892) in view of the France Patent (FR 2,597,460) (see PTO-892, paper 5), and further in view of either the France Patent (FR 2420502) (see PTO-892) or Gonzales (3,831,791) (see PTO-892).

The Soviet Union Patent (SU 887434) discloses a triangular mobile gantry crane and method to lift a load, comprising first (4), second (3), and third booms (6), each of which having a mobile base that is independently support on the ground and a vertically lift leg (Fig. 2) supported on the base; and the first boom, which can be one of them, laterally between the second and third booms substantially interconnected the lift legs; a plurality of horizontal beams (1,8,9) that functionally interconnected the lift leg to lift a load; and rigging that extends downwardly from the beam and that is detachably coupleable to the load. The Soviet Union Patent (SU 887434) shows a V-shaped first boom (4), a second boom (3), and third boom (6) to support the gantry, but does not clearly show the first boom having a vertical axis comprising a mobile base that is rotatable on the vertical axis to steer the gantry and a lift leg that is extendible about the vertical axis. However, the France Patent (FR 2,597,460) teaches a first boom (33) having a vertical axis comprising a mobile base (34,35) (see Figs. 4-8) that is rotatable on the vertical axis and a lift leg (33) that is extendible about the vertical axis to steer the gantry wherein the first boom (33) is controlled by an operator (25) (see Figs. 1 and 3). Accordingly, it would

have been obvious to those skilled in the art to replace the V-shaped first boom (4) of the Soviet Union Patent (SU 887434) with the first boom (33,34,35) of the France Patent (FR 2,597,460) so that an operator effectively and independently could control the gantry. The modified Soviet Union Patent (SU 887434) still does not show each of the booms is extendible and one of the beams (1,8,9) is linearly extendible to increase the spacing. However, the France Patent (FR 2420502) teaches a mobile gantry having an extendible boom (12,13) and an extendible beam (6) so that the span of the gantry can be adjusted to suit any width of the track (see Figs. 2 and 3). Gonzales (3,831,791) also teaches a mobile lift having an extendible boom (44,46,50) and an extendible beam (20) to adjust the spacing and the height. Accordingly, it would have been obvious to those skilled in the art to modify the boom and the beam of the Soviet Union Patent (SU 887434) as taught by either the France Patent (FR 2420502) or Gonzales (3,831,791) to be an extendible boom and the beam to be an extendible beam so that the modified gantry would be capable of lifting different sizes of loads at different locations.

Re claim 4, figures 2 and 3 of the France Patent (FR 2420502) show one outer tube (6) slidable over at least one inner tube.

Re claim 9, the France Patent (FR 2420502) shows an extendible beam having a plurality of slots, which can be considered as mounting points, and Gonzales (3,831,791) also shows an extendible beam having a plurality of apertures, which can be considered as mounting points,

Re claim 11, the modified Soviet Union Patent (SU 887434) shows wheels (5) in figure 2. It also would have been obvious to provide a single wheel on each boom (3,6) of the Soviet Union Patent (SU 887434) as taught by the France Patent (FR 2,597,460) to provide flexibility to move around the gantry.

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Re claims 17-19,22, and 23, the modified Soviet Union Patent (SU 887434) shows movable gantry having a triangular mobile gantry crane and method to lift a load, comprising first (4), second (3), and third booms (6), each of which having a mobile base that is independently support on the ground and a vertically lift leg (Fig. 2) supported on the base; and the first boom (4) laterally between the second and third booms substantially interconnected the lift legs; a plurality of horizontal beams (1,8,9) that functionally interconnected the lift leg to lift a load; and coupling a load on one of the beams (1), and rigging that extends downwardly from the beam and that is detachably coupleable to the load. Moreover, it would have been obvious to those skilled in the art would linearly extends one of the beams of the France Patent (FR 2420502) to provide a wider spacing for loading. Further, it would have been obvious to those skilled in the art would retract the booms of the France Patent (FR 2420502) to lower the load.

6. Claim 5, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) and the France Patent (FR 2,597,460) in view of either the France Patent (FR 2420502) or Gonzales (3,831,791), as applied to claims 1-4 above, and further in view of Brower (4,897,011).

The modified Soviet Union Patent (SU 887434), as presented in section 5 above, does not specifically show a first outer tube and a second outer tube sliding over an inner tube. However, Brower (4,897,011) teaches a horizontal beam (16) (Fig. 1) having a first outer tube and a second outer tube sliding over an inner tube. Accordingly, it would have been obvious to those skilled in the art to provide a first outer tube and a second outer tube sliding over an inner tube on one of the booms of the Soviet Union Patent (SU

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887434) as taught by Brower (4,897,011) to provide more flexibility to adjust the spacing between the booms.

7. Claims 6 and 8, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) and the France Patent (FR 2,597,460) in view of either the France Patent (FR 2420502) or Gonzales (3,831,791), and in view of Brower (4,897,011), as applied to claims 1-5 above, and further in view of Tana et al. (4,973,094).

The modified Soviet Union Patent (SU 887434), as presented in section 6 above, does not show a pair of cylinders on the outer tubes and inner tube to extend or extract. However, Tana et al. (4,973,094) teaches a pair of cylinders (9b,9c),10b,10c) on the respective tubes (3b,3c,4b,4c) to extend or extract. Accordingly, it would have been obvious to those skilled in the art to provide a pair of cylinders on the tubes the Soviet Union Patent (SU 887434) as taught by Tana et al. (4,973,094) to conveniently to extend or extract the beams.

8. Claim 12,13,16 and 20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) and the France Patent (FR 2,597,460) in view of either the France Patent (FR 2420502) or Gonzales (3,831,791), as applied to claim 1 above, and further in view of Rulison (4,749,324).

The modified Soviet Union Patent (SU 887434), as presented in section 5 above, does not specifically show the mobile base is 360 degree rotatable. However, Rulison (4,749,324) teaches a base (42) having a wheel (38,40) which is rotatable 360 degree (Col. 2, lines 54-65). Accordingly, it would have been obvious to those skilled in the art

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to modify each wheel the Soviet Union Patent (SU 887434) as taught by Rulison (4,749,324) so that the modified gantry could be used not only for tracks but also different locations. It also would have been obvious to those skilled in the art to provide a pair of cylinders on the beams of the Soviet Union Patent (SU 887434) to conveniently to extend or extract the beams.

Re claim 20, the modified Soviet Union Patent (SU 887434) shows a method of steering the gantry. However, the France Patent (FR 2,597,460) teaches a first boom (33) having a vertical axis comprising a mobile base (34,35) (see Figs. 4-8) that is rotatable on the vertical axis and a lift leg (33) that is extendible about the vertical axis to steer the gantry wherein the first boom (33) is steered by an operator (25) (see Figs. 1 and 3). Accordingly, it would have been obvious to those skilled in the art to replace the V-shaped first boom (4) of the Soviet Union Patent (SU 887434) with the first boom (33,34,35) of the France Patent (FR 2,597,460) so that an operator effectively and independently could steer the gantry.

9. Claim 14, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) and the France Patent (FR 2,597,460) in view of either the France Patent (FR 2420502) or Gonzales (3,831,791), and in view of Brower (4,897,011), and further in view of Rulison (4,749,324).

The modified Soviet Union Patent (SU 887434), as presented in section 5 above, does not specifically show a first outer tube and a second outer tube sliding over an inner tube. However, Brower (4,897,011) teaches a horizontal beam (16) (Fig. 1) having a first outer tube and a second outer tube sliding over an inner tube. Accordingly, it would have been obvious to those skilled in the art to provide a first outer tube and a second

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outer tube sliding over an inner tube on one of the booms of the Soviet Union Patent (SU 887434) as taught by Brower (4,897,011) to provide more flexibility to adjust the spacing between the booms. The modified Soviet Union Patent (SU 887434) still does not specifically show the mobile base is 360 degree rotatable. However, Rulison (4,749,324) teaches a base (42) having a wheel (38,40) which is rotatable 360 degree (Col. 2, lines 54-65). Accordingly, it would have been obvious to those skilled in the art to modify each wheel the Soviet Union Patent (SU 887434) as taught by Rulison (4,749,324) so that the modified gantry could be used not only for tracks but also different locations.

10. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over the Soviet Union Patent (SU 887434) and the France Patent (FR 2,597,460) in view of either the France Patent (FR 2420502) or Gonzales (3,831,791), and in view of Brower (4,897,011), further in view of Rulison (4,749,324), as applied to claim 14 above, and further in view of Tana et al. (4,973,094).

The modified Soviet Union Patent (SU 887434), as presented in section 9 above, does not show a pair of cylinders on the outer tubes and inner tube to extend or extract. However, Tana et al. (4,973,094) teaches a pair of cylinders (9b,9c), 10b,10c) on the respective tubes (3b,3c,4b,4c) to extend or extract. Accordingly, it would have been obvious to those skilled in the art to provide a pair of cylinders on the tubes the Soviet Union Patent (SU 887434) as taught by Tana et al. (4,973,094) to conveniently to extend or extract the beams.

Response to Arguments

11. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL T. CHIN whose telephone number is (571) 272-6922. The examiner can normally be reached on MON-THURS (7:30 -6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EILEEN LILLIS can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PAUL T. CHIN
Examiner
Art Unit 3652